Amendments to the Claims

The following listing of claims will replace the listing of the claims which were submitted under PCT Article 19 in the international application.

Listing of Claims

1-118 (canceled)

119-138 (new):

- 119. A method for encoding a block of digital information in a sequence of blocks of digital information, comprising a step of ascertaining a degree of correlation of the block with a plurality of predecessor blocks of the sequence.
- 120. The method of claim 119, wherein ascertaining the degree of correlation comprises the steps of:
- (a) determining residue energy on at least a portion of information from each of a chosen plurality of the predecessor blocks; and
- (b) using at least a portion of the residue energy values obtained in step (a) in ascertaining the degree of correlation.
- 121. The method of claim 120, wherein at least one of the plurality of the predecessor blocks is chosen taking into account feedback from a decoder.
- 122. The method of claim 119, wherein ascertaining the degree of correlation further comprises
 - (a) in selecting predecessor blocks, using at least one of
- (i) determining residue energy with respect to at least one of the predecessor blocks,
 - (ii) using transform domain values of residue energy information, and
- (iii) determining residue energy on at least a portion of information from each of a chosen plurality of the predecessor blocks;

and

- (b) generating motion vector information for at least a portion of the selected blocks.
- 123. The method of claim 122, where the motion vector information is represented by encoding with a codebook available at the encoder and at a prospective decoder.
- 124. A method for encoding a block of digital information, comprising the steps of
- (a) identifying a target codeword that represents at least a portion of the digital information; and
 - (b) determining a hash value from the target codeword.
- 125. The method of claim 124, wherein the hash value is determined by using any combination of:
 - (a) a checksum on the target codeword,
- (b) intra-information corresponding to a portion of the target codeword intracoded by encoding with a codebook available at both the encoder and a prospective decoder,
 - (c) the most significant bit-plane for a portion of the target codeword, and
 - (d) an arithmetic code based on a Continuous Error Detection codeword.
- 126. The method of claim 124, for a prospective decoder to keep a table of most likely codewords that result in each hash value.
- 127. The method of claim 126, wherein the encoder has access to the table, for providing the decoder with a code to indicate values encoded.
- 128. The method of claim 124, wherein the hash value is for a concatenation of a plurality of blocks.

- 129. The method of claim 128, wherein the blocks are selected so that a hash value is determined for each row of blocks within a frame and for each column of blocks within a frame.
- 130. The method of claim 128, wherein consecutive blocks following a predetermined scan of video frame blocks are concatenated to generate a hash value for the plurality of blocks.
- 131. A method for encoding a block of digital information partitioned into subblocks, comprising at least one of the steps of:
- (a) for each of at least a portion of the sub-blocks, identifying a target codeword that represents at least a portion of the corresponding sub-block of digital information;
- (b) for each of at least a portion of the sub-blocks, concatenating target codewords into a further target codeword;
- (c) for at least one of the sub-blocks, partitioning the target codeword into a plurality of target codewords;
- (d) for each of at least a portion of the sub-blocks, determining degree of correlation of the target codeword with the predecessor codeword;
- (e) for each of at least a portion of the sub-blocks, determining a plurality of codewords containing the target codeword;
- (f) for each of at least a portion of the sub-blocks, determining a hash value from the target codeword;
- (g) for each of at least a portion of the sub-blocks, for representing at least some of the values obtained in one of (d), (e) or (f), utilizing a format which comprises a plurality of fields wherein a target codeword represents at least a portion of the block, and wherein at least one field is selected from:
- (i) a field including an encoded estimate of the degree of correlation between the block and a plurality of further blocks of digital information at a decoder,
- (ii) a field including an encoded index of a set of a plurality of code words, wherein the set includes the target codeword and the value of the set, and

- (iii) a field including an encoded hash value derived from the target codeword.
- . 132. A method for transferring digital information, comprising a step of encoding by using at least one of:
- (a) identifying a target codeword that represents at least a portion of the block of digital information,
- (b) determining at least one of the degree of correlation of the block of digital information and the target codeword that represents the block with a plurality of blocks in the predecessor information,
 - (c) determining a set of codewords, wherein the set contains the target codeword,
 - (d) deriving a hash value from the target codeword, and
- (e) for representing at least some of the values obtained in one of (b), (c) and (d), utilizing a format which comprises a plurality of fields wherein a target codeword represents at least a portion of the block and wherein at least one field is selected from:
- (i) a field including an encoded estimate of the degree of correlation between the block and a plurality of further blocks of digital information at a decoder,
- (ii) a field including an encoded index of a set of a plurality of code words, wherein the set includes the target codeword and the value of the set, and
- (iii) a field including an encoded hash value derived from the target codeword; and using a decoder which sends information to the encoder that can be used by the encoder.
- 133. The method of claim 132, wherein the information sent by the decoder is used by the encoder to ascertain a degree of correlation of the block with a plurality of predecessor blocks.
- 134. The method of claim 132, wherein the information sent by the decoder is used by the encoder to ascertain a degree of correlation of the block with a plurality of predecessor blocks, and

wherein the information comprises motion vector information inferred by the decoder.

- 135. The method of claim 132, wherein the information comprises state information about the decoder.
- 136. The method of claim 135, wherein the state information comprises an estimate of predecessor information available at the decoder.
- 137. A method for encoding a block of digital video information from a plurality of sources, comprising generating a plurality of encodings for each source with/without collaboration between sources using at least one of:
- (a) identifying a target codeword that represents at least a portion of the block of digital information,
- (b) determining at least one of the degree of correlation of the block of digital information and the target codeword that represents the block with a plurality of blocks in the predecessor information,
 - (c) determining a set of codewords, wherein the set contains the target codeword;
 - (d) deriving a hash value from the target codeword, and
- (e) for representing at least some of the values obtained in one of (b), (c) and (d), utilizing a format which comprises a plurality of fields wherein a target codeword represents at least a portion of the block and wherein at least one field is selected from:
- (i) a field including an encoded estimate of the degree of correlation between the block and a plurality of further blocks of digital information at a decoder,
- (ii) a field including an encoded index of a set of a plurality of code words, wherein the set includes the target codeword and the value of the set, and
 - (iii) a field including an encoded hash value derived from the target codeword.
- 138. The method of claim 137, wherein encodings from a plurality of sources are used by the decoder to generate a representation of digital video information at a higher resolution than from individual sources.